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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

25944 7590 06/18/2009

OLIFF & BERRIDGE, PLC P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER
FAULK DEVONA E

ART UNIT PAPER NUMBER

2614

DATE MAILED: 06/18/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,679	11/08/2005	Klaus Geiger	125352	8338

TITLE OF INVENTION: METHOD AND DEVICE FOR DETERMINING ACOUSTICAL TRANSFER IMPEDANCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/18/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

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							(Depositor's name)
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							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/550,679 TITLE OF INVENTION	11/08/2005 i: METHOD AND DEVI	ICE FOR DETERMINING	Klaus Geiger G ACOUSTICAL TRANS	FER IMPEDANCE		125352	8338
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	09/18/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
FAULK, D	EVONA E	2614	038-057000	•			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Unl recordation as set fort	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DAT2 less an assignee is ident h in 37 CFR 3.11. Comp	inge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED ON 2		3 registered patent vely, e firm (having as a sigent) and the name meys or agents. If n printed.	membe s of up o name	ra 2to to is 3	ocument has been filed for
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<ol> <li>Change in Entity Sta</li> <li>a. Applicant claim</li> </ol>	tus (from status indicated s SMALL ENTITY statu		☐ b. Applicant is no lon	ger claiming SMAL	LENT	ITY status. See 37 Cl	R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regis	tered a	ttorney or agent; or th	e assignee or other party in
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P.O. BOX 320850		ART UNIT	PAPER NUMBER			
ALEXANDRIA, VA 22320-4850			2614			
	DATE MAILED: 06/18/200	9				

### Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/550,679 GEIGER ET AL. Notice of Allowability Examiner Art Unit DEVONA E FAULK 2614 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to amendment filed on 10/8/08. The allowed claim(s) is/are 1-11 and 13-15. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

Attachment(s)

1. Notice of References Cited (PTO-892)

Paper No./Mail Date

of Biological Material

2. Notice of Draftperson's Patent Drawing Review (PTO-948)

4. T Examiner's Comment Regarding Requirement for Deposit

3. Information Disclosure Statements (PTO/SB/08),

5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date .

Other .

7. T Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

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#### DETAILED ACTION

## Response to Remarks

 Claims 6-11 and 13-15 were indicated as allowable and remains in allowable form

- 2. Claim 12 is cancelled.
- The applicant has amended claim 1 to overcome 101 rejections set forth in the previous office action.

#### Allowable Subject Matter

- Claims 1-11, 13-15 are allowed.
- 5. Regarding claims 1 and 6, AAPA discloses a method of determining the acoustical transfer impedance Zt between a first position and a listening position of a human being (page 2), the method comprising generating an acoustical volume velocity Q in the listening position (page 2, lines 5-27), measuring a response quantity p at the first position resulting from the volume velocity Q (page 2, lines 5-27), and determining the acoustical transfer impedance Zt as the response quantity p divided by the acoustical volume velocity Q, Zt=p/Q Q (page 2, lines 5-27), characterized in that the acoustical volume velocity Q is generated using a simulator (implicit) simulating acoustic properties of at least a head of a human being. Prior art Reich, DE 27 16 345 A1, discloses a dummy head in which speakers are disposed in the location of ear imitations.

Prior art Kunugi et al. (US 4,739,513) discloses a simulator (A, Figure 19) including a simulated human ear having a pinnae (dummy mannequin 5-12. Figure 19) and a sound

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source (11L and 11R, Figure 19; column 11, lines 39-67) in the simulator. The prior art in general teaches of using dummy heads or simulators for measuring and correcting acoustic characteristics in a sound field.

Regarding claim 1 and 6, the prior art or combination thereof fails to disclose or make obvious outputting the acoustical volume velocity Q through the orifice. Orifice is an aperture or hole opening into a bodily cavity.

Therefore, the prior art or combination thereof fails to disclose or make obvious a method of determining the acoustical transfer impedance as claimed.

Claims 2-5, 7-11, 13-15 are allowed due to dependency on claims 1 and 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/ Primary Examiner, Art Unit 2614